

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of compilation of a source program into an object file, using one or more associated libraries of instances, wherein each instance is a specialization of a template and its available operations~~library object files~~, the method comprising:

identifying one or more instances available for use in the one or more ~~library object files~~ libraries using linker symbol names for the one or more instances;

receiving a first request to create a first instance during compilation of the source program;

determining whether the first instance has been identified in the one or more ~~library object files~~ libraries; and

when the first instance has not been identified in the one or more libraries, creating the first instance, and ~~when the determining determines that the first instance has not been identified in the one or more library object files and~~

when the first instance has been identified in the one or more libraries, ~~not creating the first instance when the first instance has been identified in the one or more library object files~~ using the linker symbol name of the first instance as a reference to the first instance already contained within the one or more libraries, thereby avoiding duplication of instances and reducing the time needed for compiling the source program.

2. (Canceled)

3. (Currently Amended) A method as recited in claim 1, wherein the creating of the first instance operates to create the first instance when the linker symbol name for the first instance does not match any of the identified linker symbol names for instances available for use in the one or more ~~library object files~~ libraries.

4. (Currently Amended) A method as recited in claim 1, wherein the identifying of one or more instances available for use in the one or more ~~library-object files~~ libraries further comprises:

accessing the one or more ~~library-object files~~ libraries;

examining linker symbol names in symbol tables within the one or more ~~library-object files~~ libraries;

selecting linker symbol names that are likely to correspond to instances available for use in the one or more ~~library-object files~~ libraries; and

saving the selected linker symbol names.

5. (Original) A method as recited in claim 4, wherein the examining of symbol tables is done to extract all linker symbol names that are likely to correspond to instances.

6. (Original) A method as recited in claim 4, wherein the selecting of the linker symbol names that are likely to correspond to instances is done by selecting linker symbol names that include a predetermined sequence of characters.

7. (Original) A method as recited in claim 4, wherein the saving of the selected linker symbol names is done by using a hash table.

8. (Currently Amended) A method as recited in claim 4,

wherein determining whether the first instance has been identified in the one or more ~~library-object files~~ libraries further comprises:

obtaining a first linker symbol name for the first instance;

comparing the first linker symbol name with those selected linker symbol names that are likely to correspond to template instances, and

wherein creating the first instance operates to create the first instance when the first linker symbol does not match any of those selected linker symbol names that are likely to correspond to template instances.

9. (Original) A method as recited in claim 1, wherein the source program is written in C++ or Ada programming language.

10. (Currently Amended) A compiler system, embodied in a computer readable medium, the compiler system being suitable for compilation of source programs into object files, the compiler system comprising:

a source program;

a library ~~object-file~~ including at least one instance available for use by the source program, the at least one instance being a specialization of a template and its available operations and being identifiable by a linker symbol name; and

an enhanced compiler suitable for compilation of source code, wherein the enhanced compiler is operable to access[[es]] the library ~~object-file~~ to identify the at least one instance available in the library ~~object-file~~ by the linker symbol name of the at least one instance, the enhanced compiler thereby avoiding duplication of instances and reducing the time needed for compiling the source programs.

11. (Previously Presented) A compiler system as recited in claim 10, wherein the enhanced compiler further comprises:

an instance extractor for extracting the at least one instance available for use by the source program.

12. (Previously Presented) A compiler system as recited in claim 11, wherein the enhanced compiler further comprises:

an instance name comparator operating to compare the at least one instance available with a desired instance.

13. (Original) A compiler system as recited in claim 12, wherein the enhanced compiler further comprises:

an instance name storage suitable for storage of the at least one instance available for use by the source program.

14. (Currently Amended) A method of compilation of a source program into an object file, using one or more associated ~~library object files~~ libraries with instances available for use by the source program, wherein each instance is a specialization of a template and its available operations the method comprising:

examining a linker name table of the one or more associated ~~library object files~~ libraries;

extracting from the linker name table one or more linker symbol names that are likely to correspond to instances;

storing the one or more linker symbol names that have been extracted as one or more stored linker symbol names;

receiving a first request to create a first instance during compilation of the source program, said first instance having a first linker symbol name;

comparing the first linker symbol name with the one or more stored linker symbol names; and

creating the first instance only when said comparing indicates that the first linker symbol name is not one of the stored linker symbol names, thereby avoiding duplication of instances and reducing the time needed for compiling the source program.

15. (Currently Amended) A method as recited in claim 14, wherein the comparing of the first linker symbol name with the one or more stored linker symbol names is done without transforming the linker symbol names of the one or more ~~library object files~~ libraries.

16. (Original) A method as recited in claim 14, wherein the source program is in C++ or Ada, and wherein storing at least one linker symbol is done by using a hash table.

17. (Currently Amended) A computer readable medium including computer program code for compilation of a source program into an object file, using one or more associated ~~library object files~~ libraries having instances available for use by the source program, wherein each instance is a specialization of a template and its available operations, the computer readable medium comprising

computer program code for identifying one or more instances available for use in the one or more ~~library object files~~ libraries, using linker symbol names for the one or more instances;

computer program code for receiving a first request to create a first instance during compilation of the source program;

computer program code for determining whether the first instance is available for use in the one or more ~~library object files~~ libraries; and

computer program code for

when the first instance has not been identified in the one or more libraries, creating the first instance, and ~~when the determining determines that the first instance has not been identified in the one or more library object files and~~

when the first instance has been identified in the one or more libraries, not creating the first instance when the first instance has been identified in the one or more library object files using the linker symbol name of the first instance as a reference to the first instance already contained within the one or more libraries, thereby avoiding duplication of instances and reducing the time needed for compiling the source program..

18. (Currently Amended) A computer readable medium as recited in claim 17, wherein the computer program code for creating the first instance operates to create the first instance when the linker symbol name for the first instance does not match any of the identified linker symbol names for instances available for use in the one or more ~~library object files~~ libraries.

19. (Currently Amended) A computer readable medium as recited in claim 17, wherein the computer program code for identifying of one or more instances available for use in the one or more ~~library object files~~ libraries further comprises:

computer program code for accessing the one or more ~~library object files~~ libraries;

computer program code for examining linker symbol names in symbol tables within the one or more ~~library object files~~ libraries;

computer program code for selecting linker symbol names that are likely to correspond to instances available for use in the one or more ~~library object files~~ libraries; and

computer program code for saving the selected linker symbol names.

20. (Previously Presented) A computer readable medium as recited in claim 19, wherein the computer program code selecting of the linker symbol names that are likely to correspond to instances is done by selecting linker symbol names that include a predetermined sequence of characters.